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PLEASE KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE



# ASCOT

BY: SHERWOOD INDUSTRIES LTD

# OWNER'S MANUAL

### WHAT TO DO IF YOU SMELL GAS

- Open windows/extinguish any open flame.
- Do not try to light any appliance.
- Do not touch any electrical switch or use any phone in your building.
- Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.



Do not store or use gasoline or other flammable vapours and liquids in the vicinity of this or any other appliance.

### **WARNING**

If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life. Installation and service must be performed by a qualified installer, service agency or the gas supplier.



This appliance may be installed in an after-market permanently located, manufactured (mobile) home, where not prohibited by local codes.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.



Massachusetts installations (Warning): This product must be installed by a licensed plumber or gas fitter when installed within the Commonwealth of Massachusetts. Other Massachusetts code requirements: Flexible connector must not be longer than 36in., a shut off valve must be installed; only direct vent sealed combustion products are approved for bedrooms/bathrooms. A carbon monoxide detector is required in all rooms containing gas fired direct vent appliances.

# SAFETY PRECAUTIONS

# FOR SAFE INSTALLATION AND OPERATION OF YOUR "ENVIRO" HEATER, PLEASE CAREFULLY READ THE FOLLOWING INFORMATION:

- All ENVIRO gas-fired appliances must be installed in accordance with their instructions. Carefully read all the instructions in this manual first. Consult the building authority having jurisdiction to determine the need for a permit prior to commencing the installation.
- **NOTE:** Failure to follow these instructions could cause a malfunction of the fireplace, which could result in death, serious bodily injury, and/or property damage.
- Failure to follow these instructions may also void your fire insurance and/or warranty.

### **GENERAL**

- Installation and repair should be done by a qualified service person. The appliance should be inspected before the first use and, at least, annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative the control compartments, burners and circulating air passageways of the appliance be kept clean.
- Due to high temperatures, the appliance should be located out of high traffic areas and away from furniture and draperies.

Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burn or clothing ignition.

- Young children should be carefully supervised when in the same room as the appliance.
- Clothing or other flammable materials should not be placed on or near the appliance.

### **FOR YOUR SAFETY**

- Installation and service must be performed by a qualified installer, service agency or gas supplier.
- This installation must conform to local codes or, in the absence of local codes, to the current CAN/CGA-B149 installation code (Canada) or National Fuel Gas Code ANSI Z223.1.2 (USA)

- To prevent injury, do not allow anyone who is unfamiliar with the stove to operate it.
- To prevent injury, if the pilot or pilot and burners have gone out on their own, open the glass door and wait 5 minutes to air out before attempting to re-light the stove.
- Always keep the area around these appliances clear of combustible material, gasoline and other flammable liquids and vapours.
- These appliances should not be used as a drying rack for clothing or for hanging Christmas stockings/ decorations.
- Due to the paint curing on the stove, a faint odor and slight smoking will likely be noticed when the stove is first used. Open a window until the smoking stops.

Always connect this gas stove to a vent system and vent to the outside of the building envelope. Never vent to another room or inside the building. Make sure the specified vent pipe is used, properly sized and of adequate height to provide sufficient draft. Inspect the venting system annually for blockage and signs of deterioration.

**WARNING:** Failure to position the parts in accordance with the diagrams in this booklet, or failure to use only parts specifically approved with this appliance, may result in property damage or personal injury.

**WARNING:** Do not operate with the glass front removed, cracked or broken. Replacement of the glass should be done by a licensed or qualified service person.

- Never use solid fuels such as wood, paper, cardboard, coal, or any flammable liquids, etc., in this appliance.
- Do not use this heater if any part has been under water. Immediately call a qualified service technician to inspect the heater and to replace any part of the control or gas control systems that have been under water.
- Do not abuse the glass by striking it or slamming the door shut.

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# CODES AND APPROVALS

**DIRECT VENT ONLY:** This type is identified by the suffix DV. This appliance draws all of its air for combustion from outside the dwelling, through a specially designed vent pipe system.

- \*\* **TOP VENT DV ONLY**\*\* This appliance has been tested and approved for installations from 0 feet to 4500 feet (1372 m) above sea level.
- **In the USA:** The appliance may be installed at higher altitudes. Please refer to your American Gas Association guidelines which state: the sea level rated input of Gas Designed Appliances installed at elevations above 2000 (610 m) feet is to be reduced 4% for each 1000 feet (305 m) above sea level. Refer also to local authorities or codes which have jurisdiction in your area regarding the de-rate guidelines.
- **In Canada**: When the appliance is installed at elevations above 4500 feet (1372 m), the certified high altitude rating shall be reduced at the rate of 4% for each additional 1000 feet (305 m).
  - This appliance has been tested by INTERTEK (**Warnock Hersey**) and found to comply with the established VENTED GAS FIREPLACE HEATER standards in CANADA and the USA as follows:

### **VENTED GAS FIREPLACE HEATER (ASCOT DV; NG/LPG)**

TESTED TO: ANSI Z21.88a-2003/CSA 2.33a-2003 VENTED GAS FIREPLACE HEATERS CAN/CGA 2.17-M91 GAS FIRED APPLIANCES FOR HIGH ALTITUDES

CSA P.4.1-02 TESTING METHOD FOR MEASURING ANNUAL FIREPLACE EFFICIENCY

### **This ENVIRO ASCOT Fireplace:**

- Has been certified for use with either natural or propane gases. (See rating label.)
- Is not for use with solid fuels.
- Is approved for bedroom or bed sitting room. (**IN CANADA**: must be installed with a listed wall thermostat. **IN USA**: see current ANSI Z223.1 for installation instructions.)
- Must be installed in accordance with local codes. If none exist, use current installation code CAN/CGA B149 in Canada or ANSI Z223.1/NFPA 54 in the USA.
- Must be properly connected to an approved venting system and not connected to a chimney flue serving a separate solid-fuel burning appliance.

**IMPORTANT NOTICE (Regarding first fire up):** When the unit is turned on for the first time, it should be turned onto high without the fan on for the first 4 hours. This will cure the paint, logs, gasket material and other products used in the manufacturing process. It is advisable to open a window or door, as the unit will start to smoke and can irritate some people. After the unit has gone through the first burn, turn the unit off including the pilot, let the unit get cold then remove the glass door and clean it with a good gas fireplace glass cleaner, available at your local ENVIRO dealer.



We recommend that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Gas Specialists.

# SPECIFICATIONS

### **DIMENSIONS:**

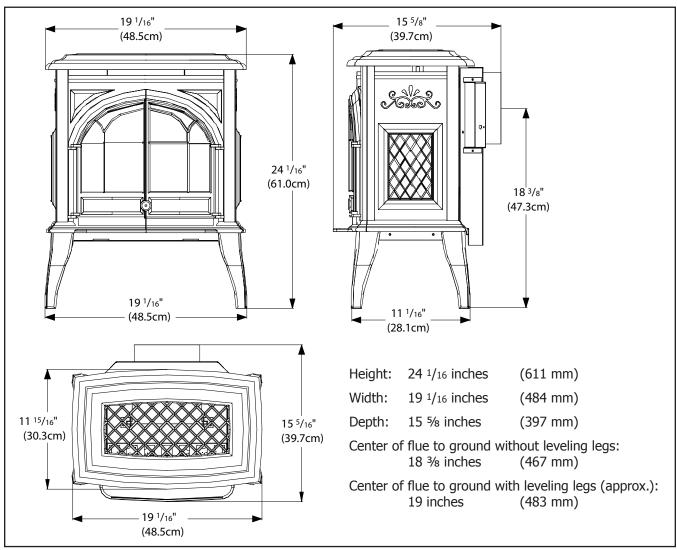


Figure 1. Dimensions of the Ascot.

### RATING LABEL LOCATION:

The Rating Label is located on a plate hang on the back left of the unit.

# OPERATING INSTRUCTIONS

### FOR YOUR SAFETY READ COMPLETELY BEFORE OPERATING.

### LIGHTING INSTRUCTIONS:

# **CAUTION** Hot while operating. Do not touch. Keep children, clothing, furniture, gasoline or other flammable vapors away.

**FOR YOUR SAFETY:** Do not operate this fireplace with the glass removed, cracked or broken. Replacement of this glass should be done by a licensed or qualified person! This appliance needs fresh air for safe operation and must be installed with provisions for combustion and ventilation air. See installation and operating instructions manual. Keep burner and control compartment dean . **WARNING:** Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury, or loss of life. Refer to owners manual. Installation and service must be performed by qualified installer, service agency or the glass removed, cracked or broken.

#### FOR YOUR SAFETY READ BEFORE OPERATING

**WARNING:** IF YOU DO NOT FOLLOW THESE INSTRUCTIONS EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.

- A) This appliance is equipped with a pilot, which must be lit by If you cannot reach your gas supplier, call the fire department. hand by following these instructions exactly.
- B) BEFORE LIGHTING smell all around the appliance area for gas and next to the floor because some gas is heavier than air and will settle on the floor.

#### WHAT TO DO IF YOU SMELL GAS:

Do not try to light any appliance. Do not touch any electrical switch: do not use any phone in your building. Immediately call your gas supplier from a neighbors phone. Follow the gas suppliers instructions.

- C) Use only your hand to push in or turn the gas control knob, Never use tools. If the knob will not push in or turn by hand, do not try to repair it. Call a qualified service technician. Force or attempted
  - repair may result in a fire or explosion.
- D) Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

#### LIGHTING INSTRUCTIONS

- 1. STOP! Read the safety information above on this label.
- 2. Turn off all electrical power to this appliance.
- Turn off the gas control knob clockwise to the of position.
- 4. Open door. Wait five (5) minutes to clear out any gas. Close door. If you smell gas, including near the floor, STOP! Follow "B" in the above safety information.
- If you do not smell gas go to the next step

  5. Find pilot-located to the right behind the side log. Tum

the gas control knob counter-clockwise to "PILOT". Push the gas control in

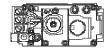
fully and hold, Keep knob depressed for a bout 30 seconds after pilot is lit. Release knob. If pilot goes cut, repeatsteps 4 through 5.



**WARNING**: this gas valve has a lockout device, which will not allow the pilot burner to be relit until the the mocouple has cooled. If the knob does not pop up when released, stop and immediately call your service technician or gas supplier.

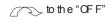
If the pilot does not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.

**6.** Turn the gas control knob counter clockwise to the "ON" position. Flip the burner switch to "ON" THEN TURN THE "HI/LOW" knob to the desired setting **7.** Turn on the electrical power to the unit.



#### TO TURN OFF GAS TO APPLIANCE

- 1. Flip burn er switch to "OFF"
- 2. Turn the gas control knob clockwise position



Turn off all electrical power to the appliance if service is to be performed.

ACUE -1

Figure 2. Lighting instruction label.

### OPERATING INSTRUCTIONS

# For Your Safety, Read Safety Precautions And Lighting Instructions Before Operating

### PILOT LIGHT:

- 1. Turn off the gas to the fireplace. If not recently done, remove the glass and let the unit air out for at least five (5) minutes to clear out any gas. Turn on gas to the heater. Leak test all joints with soapy water. NEVER USE AN OPEN FLAME FOR LEAK TESTING.
- 2. Start the pilot by pressing the gas control knob and turning it to PILOT. While holding the gas control knob in, press the piezo ignitor several times until the pilot light starts. Hold the gas control knob in for thirty (30) seconds. Check that the pilot has fully engulfed the thermocouple assembly (see Figure 3).
- Thermopile Thermocouple
- 3. Start the main burner by turning the gas control knob to ON and then turn the rocker switch to ON. Check that all burner ports have flame.
- Figure 3. Pilot flame.

4. Leak test all gas joints again.

### REMOTE CONTROLS (OPTIONAL):

This fireplace can use an optional remote control or an optional cordless wall thermostat. If either of these are to be used to control the fireplace for the majority of the time, leave the ON/OFF switch (on the control panel) in the remote/thermostat position. Consult the instructions included with the remote/wall thermostat for operation guidelines.

### BLOWER SPEED (OPTIONAL):

The blower will come on only when the fireplace is up to temperature (approximately 20 minutes). The speed of the fan can be changed by turning the fan control knob. To turn the blower off, turn the knob COUNTER CLOCKWISE until it "clicks" off.

It is advisable not to operate the blower below 1/3 speed as it puts a strain on the windings of the blower and running the blower at lower speeds could also cause premature fan failure.

### NORMAL SOUNDS DURING OPERATION:

**Table 1: Normal Sounds** 

Component	Sound & Reason
Ascot	Creaking when heating up or cooling down.
Burner	Light pop or poof when turned off; this is more common with LP units.
Temperature Sensor	Clinking when it senses to turn the blower on or off.
Pilot Flame	Quiet whisper while the pilot flame in on.
Blower / Fan	Air movement that increase and decreases with the speed of the blower. The blower is pushing the heat from the fireplace into the room.
Gas Control Valve	Dull click when turning on or off, this is the valve opening and closing.

### ROUTINE MAINTENANCE:

At least once a year, run through the following procedures to ensure the system is clean and working properly. Check the burner to see if all the ports are clear and clean. Check the pilot to make sure it is not blocked by anything. The pilot flame should be blue with little or no yellow on the tips.

Warning: Clearances must be sufficient to allow access for maintenance and service

**Warning:** Failure to position the parts in accordance with this manual, or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

The venting system must be periodically examined; it is recommended the examination is done by a qualified agency.

### **CLEANING THE GLASS:**

When the fireplace has cooled, remove the face of the fireplace along with the glass. See Maintenance And Service - Glass Door Removal. Check the gasket material on the back of the glass, making sure that it is attached and intact.

It will be necessary to clean the ceramic glass periodically. During a cold start up, condensation will sometimes form on the glass. This is a normal condition with all fireplaces. However, this condensation can allow dust and lint to cling to the glass surface. Initial paint curing of the appliance can leave a slight film behind the glass, a temporary problem. The glass will need cleaning initially after the first 4 hours of use and again about two (2) weeks after installation. **Use a mild glass cleaner and a soft cloth**; **abrasive cleaners will damage the glass and enamel surfaces.** Depending on the amount of use, the glass should require cleaning no more than two or three times a season. **Do not clean the glass when it is hot.** 

### **CLEANING THE FIREBOX:**

Remove the logs carefully, as they are very fragile. Gently remove all the embers and rock wool and place on a paper towel. Vacuum the bottom of the firebox thoroughly. Carefully clean any dust off the logs and remove any lint from the burner and pilot. At this time, inspect the burner pan for cracking or severe warping. If a problem is suspected, contact the dealer. Check the logs for deterioration or large amounts of soot; a small amount on the bottom side of the logs is normal. Replace the logs and embers as in the Log Set and Ember Installation section. If new/more embers and rock wool are required, contact your nearest ENVIRO dealer.

### CHANGE BATTERY IN IGNITION MODULE:

If the unit does not spark when lighting, the battery in the electronic ignition could need replacing.

The ignition module is located at the far left behind the valve cover (see Figure 4). Remove the battery cover, located on the left side of the module, and replace the AA battery.

Reinstall the battery cover and check for spark by depressing the pilot knob located on the control panel.

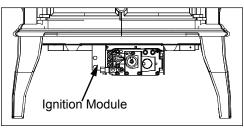


Figure 4. SIT Valve on Ascot.

### REPLACING GLASS:

The glass in the fireplace is a high temperature ceramic. If the glass is damaged in any way, a factory replacement is required (see Parts List - Components). Wear gloves when handling damaged glass door assembly to prevent personal injury. When the glass door assembly is being transported, it must be wrapped in newsprint and tape and/or a strong plastic bag. Do not operate with the glass front removed, cracked or broken. Removal and replacement of the glass from the door **must** be done by a licensed or qualified service person. **The glass must be purchased from an ENVIRO dealer. No substitute materials are allowed.** 

**To Replace:** Open door, and remove the glass carefully. Install the new piece of glass with the large bulb in the gasket tape against the unit. Place the joint in the tape in a bottom corner. Close door.

### GLASS DOOR REMOVAL:

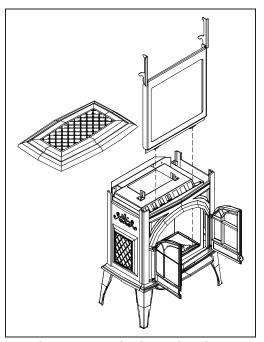


Figure 5. Removing inner glass door.

Turn unit off and wait until the appliance has cooled down. Remove the cast iron top from the unit by lifting straight up. Lift the two door handles located on either side of the door and lift the glass door assembly straight up and out. Carefully open the two doors and remove if necessary.

Ensure the door is properly fastened after cleaning before attempting to re-light the appliance.

### **BURNER REMOVAL:**

- 1. Remove the glass as shown in the Maintenance and Service Glass Door Removal.
- 2. Carefully remove the log set and ember material.
- 3. Remove the two (2) screws at the back of the fire box that hold the log support tray in place (see Figure 6). Remove the support tray from the fire box
- 4. Remove the screw located on the right side of the burner that holds the burner to the chassis inside the fire box. Remove the burner tray from the firebox.

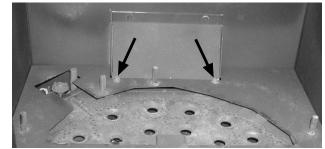


Figure 6. Removing log support tray.

### FUEL CONVERSION:

### TO BE INSTALLED BY A QUALIFIED SERVICE AGENCY ONLY

### Please read and understand these instructions before installing.

Warning: This conversion kit shall be installed by a qualified service agency in accordance with the manufacturer's instructions and all applicable codes and requirements of the authority having jurisdiction. If the information in these instructions is not followed exactly, a fire, explosion or production of carbon monoxide may result causing property damage, personal injury or loss of life. The qualified service agency is responsible for the proper installation of this kit. The installation is not proper or complete until the operation of the converted appliance is checked as specified in the manufacturer's instructions supplied with the kit.

### **Kit Parts List:**

- 1 Orifice (NG #48 DMS or LP #57 DMS)
- 1 Pilot Injector (NG 0.62 mm; LP 0.35 mm)
- 1 Installation instruction sheet
- 1 Conversion label

Carefully inspect all parts supplied with this conversion kit. If any parts have been damaged or are missing, contact your dealer, distributor or courier company to have them replaced before starting this installation.

### **Conversion Kit Installation:**

- 1. Turn control knob on the gas valve to the "OFF" position and shut the gas supply off at the shut-off valve upstream of the unit. CAUTION: The gas supply must be shut off prior to disconnecting the electrical power and before proceeding with the conversion. Allow the valve and unit to cool down to room temperature.
- 2. Remove the glass as shown in the Maintenance and Service Glass Door Removal.
- 3. Carefully remove the log set and ember material if they are installed.
- 4. Remove the burner as shown in the Maintenance and Service Burner Removal.
- 5. Convert the burner orifice(s):
  - a) Remove the main burner orifice with a ½ inch deep socket.
  - b) Put a bead of pipe-thread sealant or approved Teflon tape on the orifice threads before installing into the brass elbow.
  - c) Install the new orifice(s) from the kit into the brass elbow.
- 6. Convert the pilot injector:
  - a) Pull the pilot hood straight up to access the pilot injector.
  - b) Using a <sup>5</sup>/<sub>32</sub>" or 4 mm Allen key, remove the pilot injector.
  - c) Install the new pilot injector supplied with this conversion kit. Simply screw the new injector inside the pilot hood using the Allen key,
  - d) Reinstall the hood by placing the hood on the assembly, line up the key way, and snap into place.

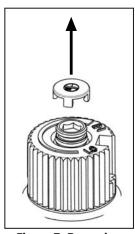


Figure 7: Removing valve cap.

### 7. Convert the SIT gas valve:

a) Remove the black protection cap from the HI/LO knob by hand shown in Figure 7.

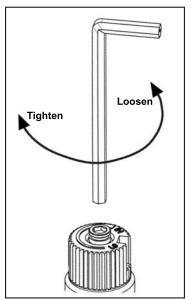


Figure 8: Removing valve screw.

- b) Insert a <sup>5</sup>/<sub>32</sub>" or 4 mm Allen wrench into the hexagonal key-way of the screw (see Figure 8), rotate it counter-clockwise until it is free and extract it.
- c) Check that the screw is clean and if necessary remove dirt.
- d) Flip the screw (refer to Figure 9).
- e) Using the Allen wrench as shown in Figure 8, rotate the screw clockwise until a torque of 9 inch lbs. WARNING! Do not over tighten the screw. It is recommended that you grip the wrench by the short side.
- f) Verify that if the conversion is from NG to LPG, the screw must be re-assembled with the red oring visible (refer to Figure 10). If the conversion is from LPG to NG, the red o-ring of the screw must be not visible.

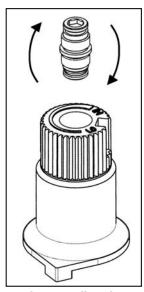


Figure 9: Flip valve screw.

- g) Re-attach the black protection cap that was removed in step a (Figure 7).
- 8. Reinstall the burner, brick panels, log set, embers, and glass door. Also refer to Secondary Installation Installing Log Set and Embers. When re-installing the burner, ensure that the burner to pilot hood relationship

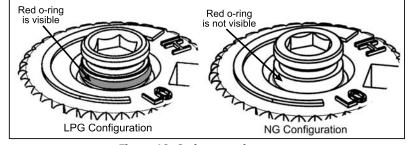


Figure 10: O-ring on valve screw.

is similar to what is shown in Figure 11. On some units you will need to pay special attention when installing the burner that the venturi adjustment rod is properly installed into the venturi adjustment piece welded to the burner venturi tube

- 9. Reconnect the main gas line if it was disconnected and open the shut-off valve at the gas line to the unit.
- 10. Use a small brush to apply a warm soapy water solution to all gas connections (use a half dish soap and half warm water). If a gas leak is present, bubbling will occur. Gas leaks can be repaired by using an approved pipe thread sealant or approved Teflon tape. NEVER USE AN OPEN FLAME WHEN TESTING FOR LEAKS.



Figure 11. Ignitor assembly beside the

- 11. Reconnect the electrical power to the unit.
- 12. Relight the main burner in both the "HI" and "LO" positions to verify proper burner ignition and operation and proper flame appearance. Also refer to Secondary Installation Log Set and Embers Installation for a flame appearance picture.
- 13. MAKE SURE that the conversion label is installed on or close to the rating label to signify that the unit has been converted to a different fuel type.

### QUALIFIED INSTALLERS ONLY

### **WARNING:**

Operation of this heater when not connected to a properly installed and maintained venting system can result in carbon monoxide (CO) poisoning and possible death.

### PREPARATION FOR INSTALLATION:

- Remove the packaging from the appliance, and check to make sure there is no damage. If damage is found, please report it to both the carrier and your dealer as soon as possible.
- Before beginning, carefully check the glass door and the log set
- Locate a position where the flue system of the stove can be properly installed without damaging the integrity of the building; e.g. cutting a wall or ceiling joist.
- Check stove and flue system clearance requirements.
- Locate the stove where it can be accessed by a gas supply line.
- Locate the stove in a large and open room that is centrally located in the house. This will optimize heat circulation and comfort.
- As the stove can be equipped with a convection fan, ensure that an electrical outlet is within 6 ft (1.8 m) of the stove.
- The flow of combustion and ventilation air must not be obstructed.

### **CLEARANCES TO COMBUSTIBLES:**

A) Sidewall to unit 10 inches (254 mm)
B) Backwall to unit 2½ inches (64 mm)
C) Corner to unit 2½ inches (64 mm)
D) Ceiling bottom of unit 60 inches (1524 mm)
E) Floor 0 inches (0 mm)

# Note: Must have hearth pad if installed on a carpeted surface.

If this unit is installed in an alcove the alcove must meet these minimum dimensions:

Width 48 inches (1219 mm)
Height 60 inches (1524 mm)
Maximum Depth 24 inches (610 mm)

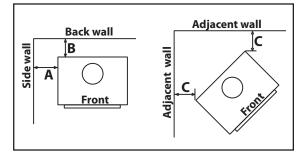


Figure 12: Clearances to combustibles.

CLEARANCES MUST BE SUFFICIENT TO ALLOW ACCESS FOR MAINTENANCE AND SERVICE.

### **QUALIFIED INSTALLERS ONLY**

### PLANNING YOUR INSTALLATION:

When planning your installation, it will be necessary to select the proper length of vent pipe for your particular requirements. It is important to note when passing through a wall, the maximum allowable wall thickness is 10 inches (25.4 cm),  $1\frac{1}{2}$  inches (3.8 cm) clearance to combustibles must be maintained. Select the amount of vertical rise desired for "vertical-to-horizontal" type installations. To determine the length of vent pipe required for vertical installations, measure the distance from the appliance flue outlet to the ceiling, the ceiling thickness, the vertical rise through the attic or second story, and allow for sufficient vent height above the roofline. For two story applications, a fire stop is required at each floor level. If an offset is needed in the attic, additional pipe and elbows will be required. To connect the venting system to the appliance flue outlet, a twist-lock adapter is built into the appliance at the factory. Refer to Initial Installation - Vent Configuration and Restrictor Settings for venting parameters.

Your total vent pipe length must be within the shaded area of Figure 36. If a 90° elbow is used in the horizontal plane, 36" (91.4 cm) must be subtracted from the allowable horizontal run.

There are two (2) basic types of Direct Vent System installations. The two (2) types of installations are shown below.

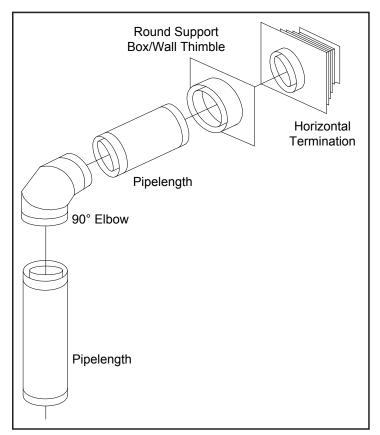


Figure 13: Common Horizontal Installation.

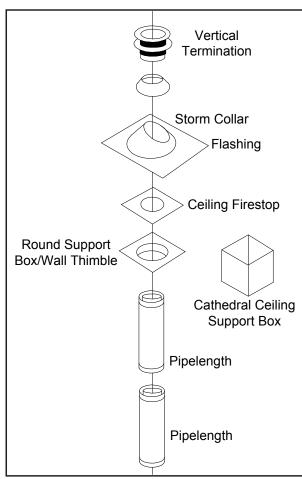


Figure 14: Common Vertical Installation.

### **QUALIFIED INSTALLERS ONLY**

### **VENT TERMINATION RESTRICTIONS:**

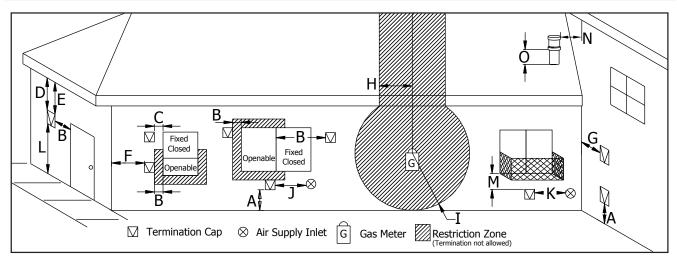


Figure 15. Vent Termination Restrictions, refer to Table 2.

Table 2: Vent termination clearances, refer to Figure 15.

Letter	Canadian Installation <sup>1</sup>	US Installation <sup>2</sup>	Description	
Α	12 in (30 cm)		Clearance above grade, verandah, porch, deck, or balcony.	
В	12 in (30 cm)	9 in (23 cm)	Clearance from window or door that may be opened.	
С	12 in (	30 cm)*	Clearance from permanently closed window (to prevent condensation).	
D	24 in (60 cm)*		Vertical clearance to ventilated soffit located above the terminal, within a horizontal distance of 2 ft (60 cm) from center line of terminal.	
E	18 in (	45 cm)*	Clearance to unventilated soffit.	
F	12 in (	30 cm)*	Clearance to outside corner.	
G	12 in (	30 cm)*	Clearance to inside corner.	
Н	3 ft (91 cm) within a height of 15 ft (4.5 m) above the meter/ regulator assembly	3 ft (91 cm) within a height of 15 ft (4.5 m) above the meter/ regulator assembly*	Clearance to each side of center line extended above meter/regulator assembly.	
I	3 ft (91 cm)	3 ft (91 cm)*	Radial clearance around service regulator vent outlet.	
J	12 in (30 cm)	9 in (23 cm)	Clearance to non-mechanical air supply inlet to building, or the combustion air inlet to any other appliance.	
K	6 ft (1.83 m)	3 ft (91 cm) above if within 10 ft (3 m) horizontally	Clearance to mechanical air supply inlet.	
L	7 ft (2.13 m <sup>)t</sup>	7 ft (2.13 m) <sup>*†</sup>	Clearance above paved sidewalk or paved driveway located on public property.	
М	12 in / 30 cm <sup>+</sup>	12 in / 30 cm* <sup>+</sup>	Clearance under verandah, porch, deck, or balcony.	
N	12 in (30 cm)*		Clearance horizontally to any surface (such as an exterior wall) for vertical terminations.	
0	12 in (30 cm)		Clearance above roof line for vertical terminations.	

 $<sup>\</sup>frac{1}{2}$  In accordance with the current CSA B149, Natural Gas and Propane Installation Code.  $^2$  In accordance with the current ANSI Z223.1 NFPA 54, National Fuel Gas Code.

### NOTE: Venting terminals shall not be recessed into walls or siding.

<sup>\*\*</sup>These numbers are only estimates. Clearance in accordance with installation codes and the requirements of the gas supplier.

\*\*These numbers are only estimates. Clearance in accordance with installation codes and the requirements of the gas supplier.

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\*\*These numbers are only estimates.\*\*

\*\*These numbers are only estimates.\*

Permitted only if verandah, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.

### **QUALIFIED INSTALLERS ONLY**

### FIREPLACE HORIZONTAL VENT KIT 50-1235:

Please read and understand these instructions before installing. Failure to follow these instructions carefully could cause property damage or personal injury.

### KIT COMPONENTS:

Qnty	Description	Qnty	Description
1	Horizontal direct vent termination cap	4	Wire spacers
1	Flue collar adapter	1	4 oz tube Mill-Pac Sealant
1	Wall thimble	1	4 oz tube RTV silicone
1	5' (190 cm) length of Ø4" (10 cm) double walled flex pipe	12	<sup>9</sup> /16" tech screws
1	5' (190 cm) length of Ø65/8" (16.8 cm) double walled flex pipe	8	11/2" wood screws

Please ensure that all components are supplied with this kit. If components are missing or have been damaged, contact your dealer, distributor, or courier company. Do not attempt the installation if components are missing or damaged.

### **INSTALLATION INSTRUCTIONS:**

- 1. Plan your installation and clearances to combustibles. Decide on a location for the unit that will meet the clearances noted in the venting section, and any or all local code requirements.
- 2. Set the appliance in the desired location. Determine if any wall study, electrical wiring, or plumbing pipes are in the way of the venting system as it passes through the exterior wall. The fireplace location should be adjusted if obstructions are found in the wall.
- 3. Project a line from the center point of the flue outlet upward and outward to the desired flue outlet location on the exterior wall. Using this center point, scribe a 10" (25.4 cm) hole or square on the wall. Cut the hole from the interior through the exterior wall surfaces.
- 4. Frame the hole as shown in Figure 22.

Wire 4 spacers

Figure 16: Wire Spacers.

- 5. Trim the wall thimble to match the wall thickness as necessary. Install the wall thimble and secure it to the inner wall frame using four (4) 11/2" wood screws. If a wall is greater than 8" (203mm) in depth, the clearance above the flex must be 43/8" (111mm)
  - 6. Apply a bead of Mill-Pac Black sealant to the new Ø4" (10 cm) by 5" (12.5 cm) provided flue collar adaptor. Press the flue collar into the flue outlet of the fireplace so that the Mill-Pac seals the flue collar to the flue outlet.
  - 7. Stretch both the  $\emptyset4''$  (10 cm) flex vent and the  $\emptyset65\%''$  (16.25 cm) flex intake liner to the length needed to ensure the flex can be easily connected to the vent terminal.
  - 8. Slide the Ø6%" (16.25 cm) flex intake liner over the flex vent. Install four (4) wire spacers around the flex pipe. Ensure the wire spacers are positioned at either end of the pipes, and at each end of any elbows in the liners (refer to Figure 16 and 17).
  - 9. Install the flex pipe assembly through the wall thimble, ensure that this portion of pipe slides through the outside wall far enough to connect onto the vent termination cap.



Figure 17: Wire Spacer in Place.

### **QUALIFIED INSTALLERS ONLY**

- 10. Apply a bead of Mill-Pac Black sealant to the top section of the Ø4" (10 cm) by 5" (12.5 cm) flue collar adaptor previously installed into the fireplace flue outlet. Slide the Ø4" (10 cm) flex vent over the flue collar and secure with three (3) sheet metal screws evenly spaced.
- 11. Place a bead of high temperature silicone on the intake collar of the fireplace, slide the Ø6%" (16.25 cm) flex intake liner over the collar, secure the flex liner with three (3) sheet metal screws evenly spaced.
- 12. On the outside of the exterior wall, apply a bead of Mill-Pac Black sealant to the Ø4" (10 cm) pipe of the vent terminal. Slide the flex liner onto the vent terminal and secure with three (3) sheet metal screws evenly spaced.
- 13. Place a bead of high temperature silicone on the intake collar of the vent terminal, slide the Ø65%" (16.25 cm) flex intake liner over the collar, secure the flex liner with three (3) sheet metal screws evenly spaced.

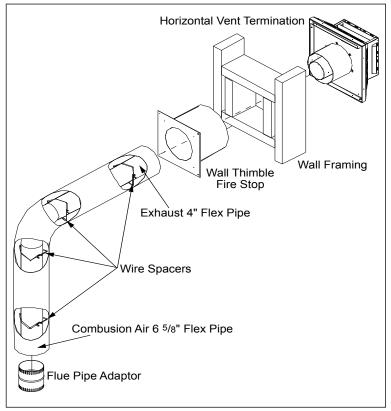


Figure 18: Installation of Fireplace Horizontal Vent Kit.

- 14. Attach the vent terminal to the outside of the house using four (4) wood screws provided.
- 15. Light the appliance and ensure proper operation.

### OTHER APPROVED VENT PARTS:

**Table 3: Approved Vent Manufacturers** 

Manufacturer	Trade Name	<b>Nominal Sizes</b>
American Metal Products	AmeriVent Direct	4" - 6 5/8"
Security Chimneys International LTD	Secure Vent	4" - 6 5/8"
Selkirk Metalbestos	Direct-Temp	4" - 6 5/8"
Simpson Dura-Vent	Direct Vent GS	4" - 6 5/8"

The Ascot fireplace has been tested and certified for use with AMERICAN METAL PRODUCTS "AMERIVENT DIRECT", SIMPSON DURAVENT TYPE GS PIPE FOR GAS STOVES. SECURITY CHIMNEY'S "SECURE VENT DIRECT VENT SYSTEM" and SELKIRK "DIRECT-TEMP VENT SYSTEM" kits are available for horizontal and vertical venting. When using Simpson Duravent, it is recommended that, before installation, a bead of RTV High Temperature Silicone should be applied to each outer vent joint, and Mil-Pac to each inner joint. When planning an installation, it will be necessary to select the proper length of vent pipe for the particular requirements.

WARNING: Do not mix parts from different vent manufacturers' systems.

### **QUALIFIED INSTALLERS ONLY**

EXCEPTION TO WARNING: This product has been evaluated by Intertek for using a Direct Vent GS starting collar in conjunction with Secure Vent, Direct-Temp, and Ameri Vent Direct venting systems. Use of these systems with the Direct Vent GS starting collar is deemed acceptable and does not affect the Intertek WH listing of the appliance.

Table 4: Vent part numbers (Must state if galvanized or black wanted, PART NUMBERS).

Direct Vent GS	Direct-Temp	Secure Vent	Ameri Vent Direct	Description
908	4DT-6	SV4L6		6" pipe length
		>>	4D7	7" pipe length
907	4DT-9	>>		9" pipe length
906	4DT-12	SV4L12	4D12	12" pipe length
904	4DT-24	SV4L24	4D2	24" pipe length
903	4DT-36	SV4L36	4D3	36" pipe length
902	4DT-48	SV4L48	4D4	48" pipe length
945	4DT-EL45	SV4EBR45	4D45B	45° elbow, black
990	4DT-EL90	SV4EBR90	4D90B	90° elbow, black
950	4DT-VS	SV4VS		Vinyl siding standoff/sheild
942	4DT-WT	SV4RSN	4DWT	Wall thimble
953	4DT-SC	SV4FC	4DSC	Storm collar
963	4DT-FS	SV4BF	4DFSP	Fire stop
988	4DT-WS/B	SV4BM	4DWS	Wall strap/support/band
970	4DT-HKA	SV0SHK	4DHTK1	Horizontal termination kit (SD: Basic Kit, SEL: Kit A, SC: Standard Kit)
911		>>		11" to 14 5%" pipe, adjustable
	4DT-AJ	>>	4D12A	4" to 10" pipe , adjustable
		SV4LA12		1½" to 12" pipe , adjustable
943	4DT-AF6	>>	4DF	Flashing, 0/12 to 6/12 roof pitch
943S	4DT-AF12	>>	4DF12	Flashing, 7/12 to 12/12 roof pitch
$\geq <$	$\searrow \searrow$	SV4FA	$\searrow$	Flashing, 1/12 to 7/12 roof pitch
$\geq <$	$\searrow \searrow$	SV4FB	$\searrow$	Flashing, 8/12 to 12/12 roof pitch
943F	$\searrow$	SV4F		Flat flashing
980	4DT-VC	SV4CGV	4DVC	Vertical termination
991	4DT-HVC	>>		High wind vertical termination
984	4DT-HC	SV4CHC	4DHC	Horizontal square termination
985	4DT-HHC	$\geq <$		High wind horizontal termination
978	4DT-VKC	SV0FAK	4DVTK	Vertical termination kit
971	4DT-HKB	SV0SHK2	4DHTK2	Horizontal termination kit (SD: Kit A, SEL: Kit B, SC: Kit)

### **VENT RESTRICTOR SETTING:**

To access restrictor plate, look at the left hand rear corner of the unit. There is a small rectangular hole in the air jacket. Loosen the ¼" hex head bolt and adjust to the correct setting. Slide the hex bolt to the next setting and retighten the bolt to ensure the plate does not move

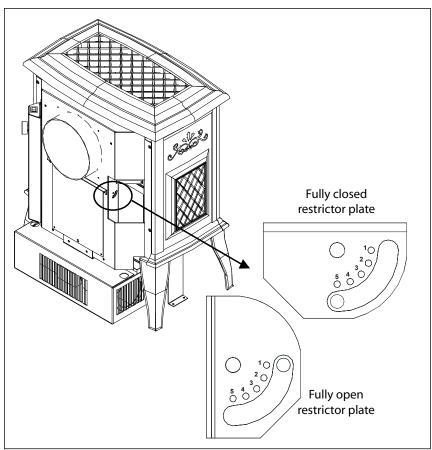


Figure 19. Vent Restrictor Settings.

Refer to Figure 20 to determine were the vent restrictor should be set for proper operation.

The numbers in the chart represent the actual vent restrictor settings. Although the numbers do not appear on the unit use this guide to follow.

Ensure that the setscrew is retightened and the unit is checked for proper operation.

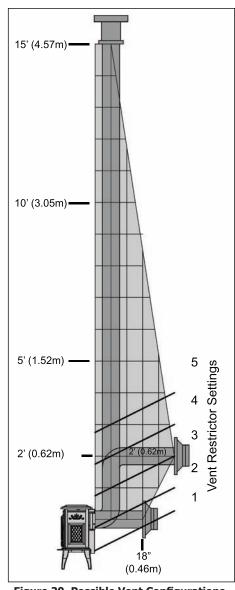


Figure 20. Possible Vent Configurations.

Wait for the unit to warm up to operating temperature to ensure a proper and clean burning unit.

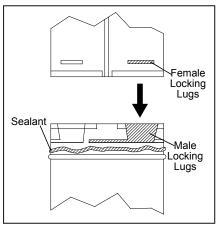
**NOTE:** The total length of the vent pipes can not exceed 15 feet (4.6 m). Any combination of rise and run can be used as long as it lays within the shaded area.

### **QUALIFIED INSTALLERS ONLY**

### HORIZONTAL INSTALLATION:

**STEP 1.** Set the appliance in the desired location. Check to determine if wall studs or roof rafters are in the way when the venting system is attached. If this is the case, you may want to adjust the location of the appliance.

**STEP 2.** Direct vent pipe and fittings are designed with special twist-lock connections. Assemble the desired combination of black pipe and elbows to the appliance adapter with pipe seams oriented towards the wall or floor, as much out of view as possible.



**Figure 21: Twist-Lock Connection** 

Place a bead of Mil-Pac on the outer edge of the inner exhaust pipe (non-flared end). Place a bead of high temperature silicone on the male edge of the outer pipe. Push the pipe sections completely together, then twist-lock one section clockwise approximately ¼ turn, until the two sections are fully locked. The female locking lugs will not be visible from the outside, on black pipe. They may be located by examining the inside of the female ends as shown in Figure 21.

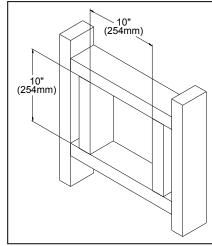


Figure 22: Wall Framing Hole for Horizontal Installation.

### **Notes:**

- (1) Twist-lock procedure: four (4) indentations, located on the female end of the pipes and fittings, are designed to slide straight onto the male ends of adjacent pipes and fittings, by orienting the four pipe indentations so they match and slide into the four entry slots on the male end.
- (2) Horizontal runs of vent pipe must be supported every three (3) feet. Wall straps are available for this purpose, also when running horizontal pipe minimum clearances to combustibles must be maintained; 2" (5.1 cm) at top, 11/2" (3.8 cm) at sides, 11/2" (3.8 cm) at bottom.

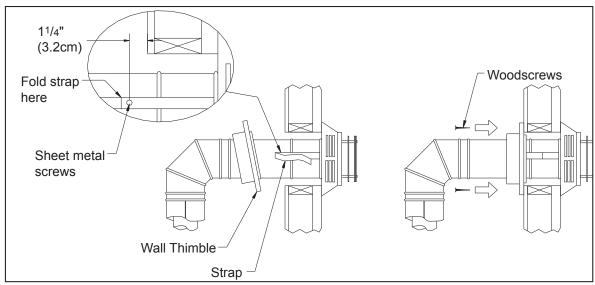


Figure 23: Installing Decorative Wall Thimble.

### **QUALIFIED INSTALLERS ONLY**

- **STEP 3.** With the pipe attached to the stove in the correct location, mark the wall for a 10" (25.4 cm) x 10" (25.4 cm) square hole (refer to Figure 22). The center of the square hole should match the center line of the horizontal pipe. Cut and frame the 10" (25.4 cm) x 10" (25.4 cm) hole in the exterior wall where the vent will be terminated. Refer to Figure 15. If the wall being penetrated is constructed of non-combustible material i.e. masonry or concrete, a 7 inches (17.8 cm) hole is acceptable.
- **STEP 4.** Position the horizontal vent termination in the center of the 10" (25.4 cm) x 10" (25.4 cm) hole, and attach to the exterior wall with the four screws provided. Before attaching the vent termination to the exterior wall, run a bead of non-hardening mastic around the edges, so as to make a seal between the termination and the wall. The arrow on the vent termination should be pointing up, insure that the proper clearances to combustible materials are maintained.
- **STEP 5.** Before connecting the horizontal run of the vent pipe to the vent termination, slide the black decorative wall thimble cover over the vent pipe.
- **STEP 6.** Slide the appliance and vent assembly towards the wall, carefully inserting the vent pipe into
  - the cap assembly. It is important that the vent pipe extend into the vent cap a sufficient distance with a minimum of 1¼" (3.2 cm) overlap. Secure the connection between the vent cap pipe and the vent cap by attaching the two sheet metal straps extending from the vent cap assembly into the outer wall of the vent pipe. Use the two sheet metal screws provided to connect the straps to the vent pipe. Bend any remaining portion of the sheet metal straps back towards the vent cap, so the decorative wall thimble will conceal it (see left image in Figure 23).
- **STEP 7.** Slide the decorative wall thimble up to the wall surface and attach with the screws provided. Apply decorative brass or chrome trim if desired (see right image in Figure 23).

### **NOTES:**

- (1) The four wood screws provided should be replaced with the appropriate fasteners for stucco, brick, concrete, or other types of siding.
- (2) For buildings with vinyl siding, a vinyl siding standoff, should be installed between the vent cap and the exterior wall (see Figure 24). Attach the vinyl siding standoff to the horizontal termination. The vinyl siding standoff prevents excessive heat from possibly melting the vinyl siding material. Note that the horizontal vent termination bolts onto the flat portion of the vinyl siding standoff (shaded area in Figure 24), so that an air space will exist between the wall and the vent termination.

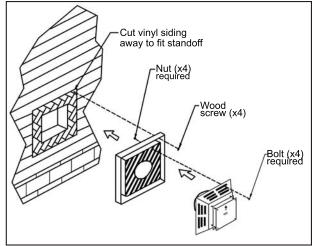


Figure 24: Installing Vent Cap with Vinyl Siding Stand-Off.

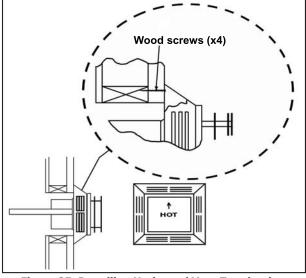


Figure 25: Installing Horizontal Vent Termination.

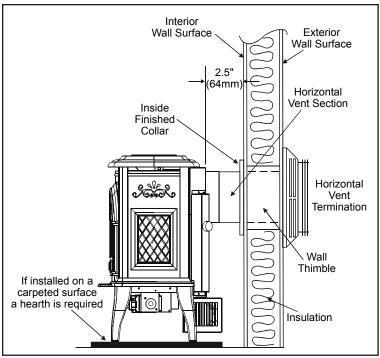


Figure 26: Straight Through Wall Installation.

### **NOTES:**

- (1) The horizontal run of vent pipe must be level and **should have a 1/4" rise** for every one foot of run towards the termination. Never allow the vent to run downward. This could cause high temperature and may present the possibility of a fire.
- (2) The location of the horizontal vent termination on the exterior wall must not be easily blocked or obstructed. Refer to Initial Installation Vent Termination Restrictions.
- (3) When installing a vent pipe in a chase the minimum clearance to combustibles is 2" (51 mm).

**NOTE:** Vent pipe must not be longer than 18" (457 mm) maximum when installing straight through exterior wall.

Maintain manufacturer's clearances to combustibles with venting.

Vent may extend between 6" (152 mm) and 18" (457 mm) maximum straight out.

When installing this unit in a corner the maximum distance after 45° elbow is 9" (228 mm).

If between 9" (229 mm) and 24" (610 mm), a 14" (356 mm) snorkel must be used.

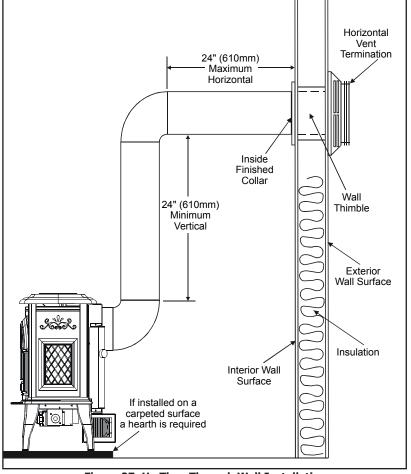


Figure 27: Up Then Through Wall Installation.

### **QUALIFIED INSTALLERS ONLY**

### VERTICAL INSTALLATION:

- 1. Check the instructions for required clearances (air spaces) to combustibles when passing through ceilings, walls, roofs, enclosures, attic rafters, or other nearby combustible surfaces. Do not pack air spaces with insulation.
- 2. Set the gas appliance in the desired location. Drop a plumb bob down from the ceiling to the position of the appliance flue exit, and mark the location where the vent will penetrate the ceiling. Drill a small hole at this point. Next, drop a plumb bob from the roof to the hole previously drilled in the ceiling, mark the spot where the vent will penetrate the roof. Determine if ceiling joists, roof rafters, or other

framing will obstruct the venting system. You may wish to relocate the appliance, or to offset, to avoid cutting load bearing members.

- **3.** To install the Round Support Box/Wall Thimble in a flat ceiling, cut a 10 inch (25.4 cm) square hole in the ceiling, centered in the hole drilled in Step 2. Frame the hole as shown in Figure 29.
- 4. Assemble the desired lengths of black pipe and

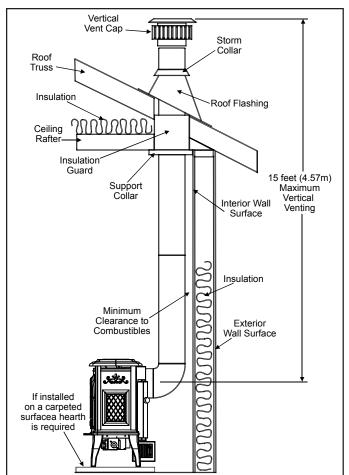


Figure 29: Vertical Installation.

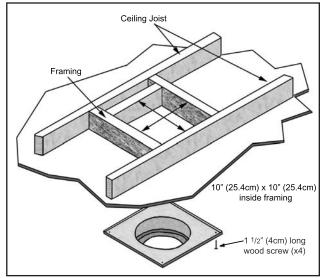


Figure 28: Wall Framing Hole for Vertical Installation.

elbows necessary to reach from the appliance adapter up through the Round Support Box. Insure that all pipe and elbow connections are in their fully twist-locked position.

- 5. Cut hole in the roof centered on the small hole placed in the roof from Step 2. The hole should be of sufficient size to meet minimum requirements for Clearance to Combustibles, as specified. Continue to assemble lengths of pipe and elbows necessary to reach from the ceiling support box up through the roof line. Galvanized pipe and elbows may be utilized in the attic, as well as above the roof line. The galvanized finish is desirable above the roof line, due to the higher corrosion resistance.
- **6.** Once the pipe sections have been joined, and run up through the hole in the roof, slip an elbow strap over the exposed sections, bend the support straps outwards, and push the

### **QUALIFIED INSTALLERS ONLY**

elbow strap down to the roof level, as shown in Figure 30. Tighten the clamp around the pipe section. Use a level to make sure the pipe is truly vertical. With roofing nails, secure the support straps to the roof. Seal the nails holes heads with non-hardening mastic. Trim the excess length of the support straps that extend out beyond the edge of the flashing.

**7.** Slip the flashing over the pipe section protruding through the roof. Secure the base of the flashing to the roof with roofing nails. Use a non-hardening sealant between the uphill edge of the flashing and the roof. Insure the roofing material overlaps the top edge of the flashing as shown in Figure 30. Verify that you have at least the minimum clearance to combustibles at the roof line.

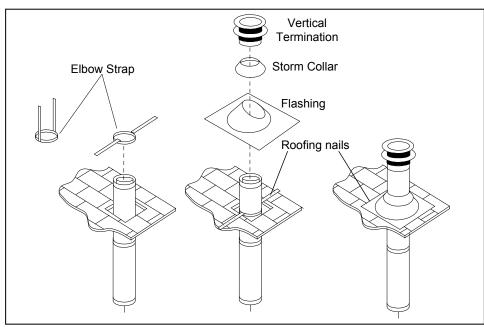


Figure 30: Vertical Vent Termination Installation.

- **9.** Slip the storm collar over the pipe, and push it down to the top of the roof flashing as shown in Figure 30. Use the non-hardening sealant around the joint between the pipe and the storm collar.
- **10.** Twist-lock the vent cap.

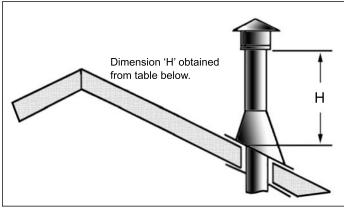


Figure 31: Height of Vertical Termination; Reference Table 5.

8. Continue to add pipe sections until the height of the vent cap meets minimum code requirements. Refer to Figure 31 and Table 5. Note that for steep roof pitches, the vent height must be increased. In high wind conditions, nearby trees, adjoining roof lines, steep pitched roofs, and other similar factors can result in poor draft, or down drafting. In these cases, increasing the vent height may solve the problem.

Table 5: Minimum 'H' for Figure 31.

Roof Pitch	Minimum Height	
	Feet	Meters
Flat to 7/8	1	0.3
Over 7/12 to 8/12	1.5	0.46
Over 8/12 to 9/12	2	0.61
Over 9/12 to 10/12	2.5	0.76
Over 10/12 to 11/12	3.25	0.99
Over 11/12 to 12/12	4	1.22
Over 12/12 to 14/12	5	1.52
Over 14/12 to 16/12	6	1.83
Over 16/12 to 18/12	7	2.13
Over 18/12 to 20/12	7.5	2.29
Over 20/12 to 21/12	8	2.44

### **QUALIFIED INSTALLERS ONLY**

### **NOTES:**

- (a) If an offset is necessary in the attic to avoid obstructions, it is important to support the vent pipe every 3 feet (91 cm), to avoid excessive stress on the elbows, and possible separation. Wall straps are available for this purpose (see Figure 32).
- **(b)** When ever possible, use 45° degree elbows instead of 90° degree elbows. The 45° degree elbow offers less restriction to the flow of flue gases and intake air.
- (c) For multi story installations. A ceiling firestop is required at the second floor, and any subsequent floors (see Figure 33). The opening should be framed to 10" (25.4 cm) x 10" (25.4 cm) inside dimensions, in the same manner as shown in Figure 28.
- (d) Any occupied areas above the first floor, including closets and storage spaces, which the vertical vent passes through, must be enclosed. The enclosure may be framed and sheet rocked with standard building materials. However consult the appliance manufactures installation instructions for the minimum allowable clearance between the outside of the vent pipe, and the combustible surfaces of the enclosure. Do not fill any required air spaces with insulation

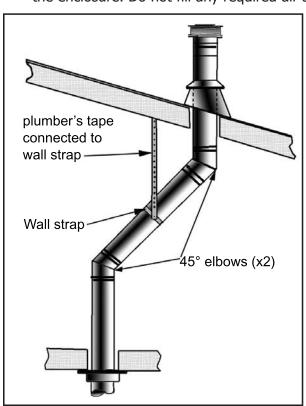


Figure 32: Use of Wall Straps.

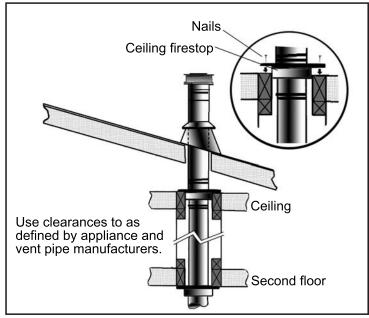


Figure 33: Multi-Story Vent Pipe Installation.

### **QUALIFIED INSTALLERS ONLY**

### Freestanding Drafthood Adaptor - 50-841:

This Drafthood Adaptor is a complete assembly and is ready to fit onto your Westport in a vertical vent application only. With the Drafthood Adaptor correctly installed and wired to the gas control valve. Your Direct Vent Fireplace can be vented like a B-Vent Fireplace.

### **INSTALLATION:**

**WARNING:** This Freestanding Drafthood Adaptor must be fitted by a qualified service technician.

- **1.** Remove the Drafthood Adaptor from the packaging. Ensure the unit and wire harness are undamaged. If there is damage contact your dealer, distributor, or courier company before starting this installation.
- **2.** Install the adaptor so the wires exit to the rear of the fireplace. Slide the Drafthood Adaptor over the outlet pipe of the fireplace until the bottom of the adaptor collar stops on the top of the outlet. The Drafthood Adaptor must be safely secured to the vent flanges with either self-tapping screws and/or high temperature sealant.

**WARNING:** During the fitting of the Drafthood Adaptor, ensure that the wires are not pinched between the adaptor and the collar and/or flue outlet. Ensure that the opening of the Drafthood Adaptor is not blocked or obstructed.

- **3.** Being careful not to run any wiring tight across metal edges; connect them to the valve and "ON/OFF" switch (refer to Figure 39).
- **4.** Adjust the restrictor plate to position 2.5 of 5. See the vent restrictor settings in the instruction manual.
- **5.** Adjust the embers on the burner so they don't cover the burner ports.

### **WIRING DIAGRAM:**

The fireplace connections are labelled in Figure 39. When installing the Drafthood Adaptor onto a fireplace fitted with an optional wall switch or an optional thermostat, remove one wire from the switch to the gas valve and connect the Drafthood Adaptor harness as shown in Figure 39.

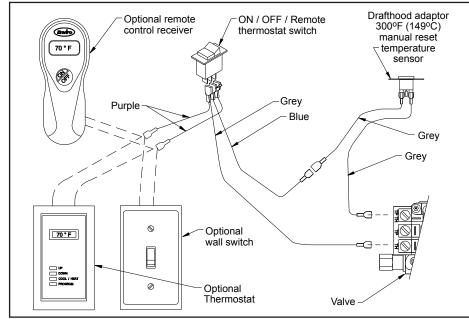


Figure 39: Wiring Diagram for Electrical Connection.

### **GENERAL VENTING INFORMATION:**

### **Canadian Installations**

The venting system must be installed in accordance with the current CSA B149 installation code and/or local codes having jurisdiction.

### **U.S.A.** Installations

The venting system must be installed in accordance with the current National Fuel Gas Code, ANSI Z223.1, and/or local codes having jurisdiction.

The minimum clearance to combustibles is 6'' (150 mm) when using single wall venting and 1'' (25 mm) when using "B-vent" venting.

We strongly recommend installing an approved chimney liner in an existing brick chimney. This will maximize the potential draft of the chimney and lessen the effects of slow chimney start-up.

### **VENTING OF A FIREPLACE FITTED WITH THE DRAFTHOOD ADAPTOR:**

**Note:** Please refer to the chimney manufacturer's installation instructions prior to commencing the installation.

This unit may be vented to an existing masonry chimney, or where no masonry chimney is available, an approved "B-vent" chimney, or any other approved constructed chimney/vent system (see Figure 40 & 41).

In either case, the fireplace may be connected to the chimney/vent using a 4" (10 cm) single wall vent connector.

When an existing masonry chimney is utilized for the venting, we recommend the vent connector be connected to an approved 4" (10 cm) diameter flue liner running the full height of the chimney. In many jurisdictions this flue liner may be mandatory.

If 4'' (10 cm) single wall vent is used, a minimum of 6'' (15 cm) must be maintained between the vent connector and any combustibles.

If 4" (10 cm) "B-vent" is used a minimum of 1" (25 mm) must be maintained between the vent connector and any combustibles.

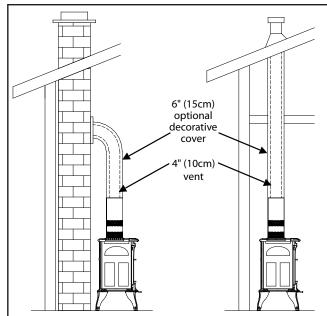


Figure 40: Unit top venting styles.

**CAUTION:** A minimum vent height of 12' (3.6 m) from the floor is required to effectively vent this fireplace.

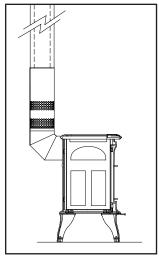


Figure 41: Unit rear venting style.

### **SPILLAGE TEST:**

A spillage test must be performed prior to leaving the installed fireplace with the customer. Perform this test in the following manner:

- 1. Close all windows and doors in the room.
- 2. Start all exhaust fans in the house and the furnace blower.
- 3. Light the fireplace and set to maximum flame adjustment.
- 4. After a minimum of 10 minutes operation, test the chimney draft with a smoke match at the top row of the pattern to confirm that there is adequate draft or 'pull' at the openings around the body of the Drafthood Adaptor, as shown in Figure 43.

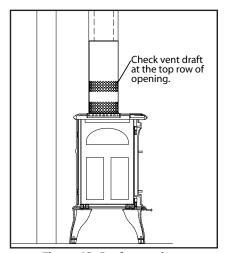


Figure 42: Draft test place.

### **AUTOMATIC SAFETY SHUT DOWN:**

If the spill switch is activated and shuts off the main burner the following procedure should be followed.

- Is the pilot flame still on? If not, the reason for the fireplace shut down is not the spill switch.
- Turn off the pilot flame and turn off all controls. Let fireplace to cool down. Refer to Owner's Manual.
- Check for blockages or restrictions in the flue and venting components.
- Restart the fireplace and check for vent draft as described earlier.
- Operate the fireplace in a normal manner.
- If the main burner shuts down again after a period of operation, turn off the fireplace and contact your service technician.

### **SPILL SWITCH REPLACEMENT:**

Use the following instructions to replace the Safety Spill Switch.

- 1. Turn the unit off and allow it to cool.
- 2. Disconnect the spill switch wires from the valve and on/off/remote rocker switch wire (see Figure 39).
- 3. Remove the four mounting screws holding the spill switch bracket and remove the bracket (see Figure 43).
- 4. Remove and replace the spill switch with a 50-885 Spill Switch Assembly using a T-20 torx type driver.
- 5. Follow the reverse of the previous steps.



Figure 43: Spill switch installation.

### **OPTIONAL FINISHING:**

In installations where the flue connector is running from the drafthood into a non-combustible chimney the following optional finishing technique can be used.

CAUTION: Installations where the flue connector or venting connects to, or passes through, combustible walls or ceilings, the inner vent components must be 'B-vent'. It is not allowable in these applications to use single wall inner vent components.

For decorative purposes a 6'' (15 cm) single wall black stove pipe may be installed over the 4'' (10 cm) single wall or 'B-Vent'.

Note: The use of these components is for aesthetic purposes only and does not effect the fact that the fireplace, when fitted with the Drafthood Adaptor, is a Natural Vent appliance and therefore draws air in through the Drafthood Adaptor intake ports.

### **HEARTH MOUNT INSTALLATION:**

This unit may be installed as a hearth mounted unit.

Install two 3' inch pipes up the chimney to a seal plate and cap assembly, one exhaust pipe, and one air intake pipe

Using venting manufactures coaxial to co-linear adapters at the unit and at the chimney termination.

Maximum vertical chimney height 15 feet (4.57 m)

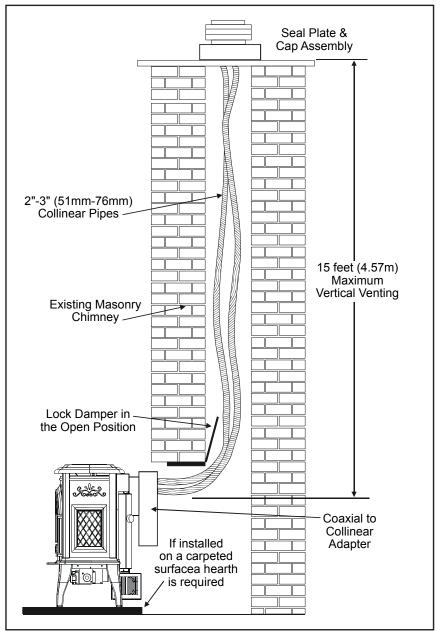


Figure 44: Hearth Mount Installation.

### GAS LINE CONNECTION AND TESTING:

**WARNING:** Only persons licensed to work with gas piping may make the necessary gas connections to this appliance.

### **GAS LINE CONNECTION**

- This stove is equipped with a certified flexible pipe located on the right side of the unit terminating in a 3%" male NPT fitting. Consult your local authorities codes or the CAN/CGA B 149 (1 or 2) installation code in Canada, or in the USA gas installations follow either local codes or the current edition of the National Fuel Gas Code ANSI Z223.1.
- The efficiency rating of this appliance is a product thermal efficiency rating determined under continuous operating conditions and was determined independently of any installed system.

The appliance and its shutoff valves must be disconnected from the gas supply piping system during any pressure testing where the pressure exceeds ½ PSIG (3.45 KPa) or damage will occur to the valve.

The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than ½ psig (3.45 KPa).

Always check for gas leaks with a soap and water solution after completing the required pressure test.

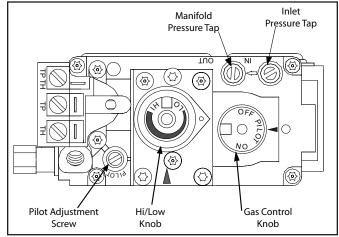


Figure 45: Fully Labeled Gas Valve.

#### TO TEST VALVE PRESSURES

The pressure taps are located on the left side of the valve

- Turn set screw 1 turn counter clockwise to loosen,
- Place 5/16" (8 mm) I.D. hose over pressure tap system.
- Check pressures using a manometer.
- When finished, release pressure, remove hose & tighten set screw.

	Natural Gas	Propane
Main Burner	#48 DMS	#57 DMS
Manifold Pressure	3.8" W.C. / 0.95KPa	11.0" W.C. / 2.7KPa
Min. Manifold Pressure	1.1" W.C. / 0.27KPa	2.7" W.C. / 0.67KPa
Max Supply Pressure	7.0" W.C. / 1.74KPa	13.0" W.C. / 3.28KPa
Min. Supply Pressure	5" W.C. / 1.24KPa	12.0" W.C. / 2.98KPa
Max BTU/hr Input	17,000 BTU/hr / 4.98KW	16,000 BTU/hr / 4.68KW
Min. BTU/hr Input	10,000 BTU/hr / 2.93KW	8,000 BTU/hr / 2.34KW

Table 6: Pressure and BTU Information.

# **NEVER USE AN OPEN FLAME FOR LEAK TESTING.**

### **ELECTRICAL REQUIREMENTS:**

The ENVIRO ASCOT will operate without electrical power. This model has a millivolt gas control, which uses the pilot flame to generate enough electricity to operate the main burners. The appliance when equipped with an optional blower must be electrically connected and grounded in accordance with local codes or in the absence of local codes, with the current CSA C22.1 CANADIAN ELECTRICAL CODE Part 1, SAFETY STANDARDS FOR ELECTRICAL INSTALLATIONS, OR THE NATIONAL ELECTRICAL CODE ANSI / NFPA 70 in the U.S.

**WARNING:** Electrical grounding instructions. This appliance is equipped with a three-prong (grounding) plug for your protection against shock hazard, and should be plugged directly into a properly grounded three-prong outlet. DO NOT cut or remove the grounding prong from this pluq.

**CAUTION:** Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

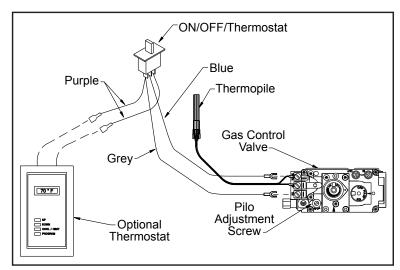


Figure 46. Wiring Diagram For Gas Valve.

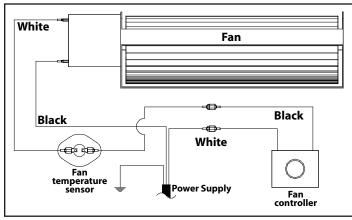


Figure 47. Wiring Diagram For Fan Control.

Table 7. Recomme	nded Thermostat Wire Size
\\/' C'	Maria Lawrella

Wire Size	Max. Length		
14 gauge	100 ft (30.48 m)		
16 gauge	60 ft (18.29 m)		
18 gauge	40 ft (12.00 m)		
20 gauge	25 ft (7.62 m)		
22 gauge	18 ft (5.49 m)		

# SECONDARY INSTALLATION

### INSTALLATION OF LOG SET AND EMBERS:

The placement of the logs is not arbitrary. If they are positioned incorrectly, the flames can be "pinched" and will not burn correctly. The burner come with four (4) locator pins (see Figure 48), and the bottom

logs have ledges which make alignment easier. Using the pictures provided, carefully set the logs in place.

NOTE: The logs are fragile and should be handled gently.

**CAUTION:** Use only the type of ember material supplied with this appliance. Due to the irregular size of the ember material there may be more than required. The use of other foreign materials on the burners may create dangerous conditions.

If over time, through cleaning and servicing, these embers require replacement, contact the nearest ENVIRO dealer for replacement embers.

- 1. Carefully remove logs from box. Check to ensure there is no damage. It is very important to install all logs in their proper position to insure safe, optimum operating conditions.
- 2. Place the log set into the firebox. Locate each log by seating it down onto the burner tray support pins. Follow the figures to the right for proper log placement.

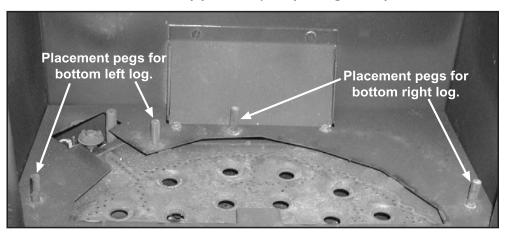


Figure 48. Ascot Burner Tray.

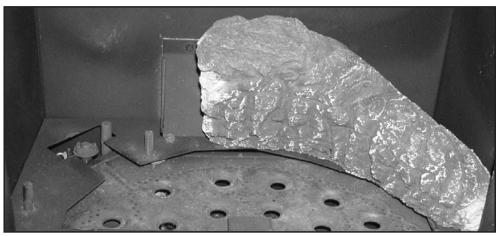


Figure 49. Log Placement Step 1.

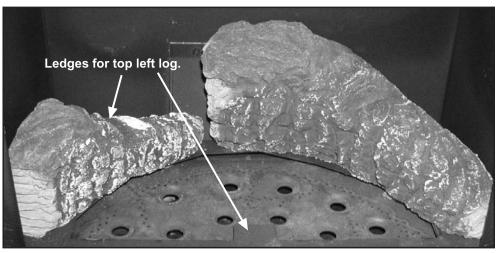


Figure 50. Log Placement Step 2.

# SECONDARY INSTALLATION

- 3. A bag of ceramic fiber embers and rock wool embers is provided gently remove the ember material from the plastic bag. Spread a layer loosely across the burner tray. Do not allow any embers to rest against pilot assembly. (See diagram provided ember for proper placement.)
- 4. DO NOT pack this ember material as this could create an unsafe condition, leave embers loose
- 5. Upon the first light up, watch for ignition to **ALL** burner ports. If a long delay is noted: First, wait for the appliance to cool down.
- Open the front door of the appliance.
- Check to carefully reposition the embers making sure that burner ports are not plugged solid or blocked.

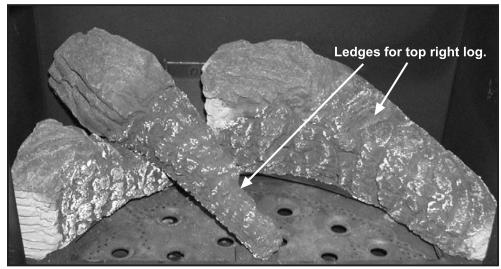


Figure 51. Log Placement Step 3.

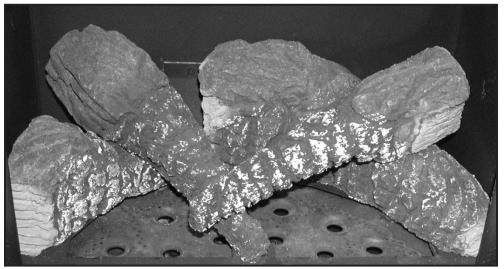


Figure 52. Log Placement Step 4.

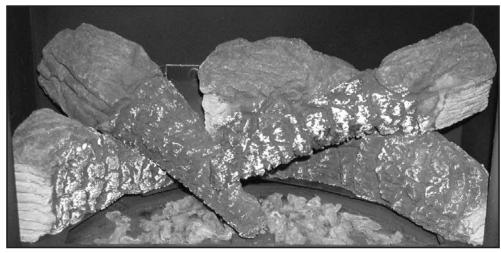


Figure 53. Ember Placement.

# SECONDARY INSTALLATION

**Important note:** When the unit is turned on for the first time, It should be turned onto high without the fan on for the first 4 hours. This will cure the paint, logs, gasket material and the other products used in the manufacturing process. It is advisable to open a window or door, as the unit will start to smoke and can irritate some people. After the unit has gone through the first burn turn the unit off including the pilot, let the unit get cold then remove the glass door and clean it with a good gas fireplace glass cleaner, available at your local ENVIRO dealer.

See Routine Maintenance And Service on how to remove door to clean glass.



Figure 54. Ascot Burning.

### CAUTION: NEVER OPERATE THIS APPLIANCE WITH THE DOOR REMOVED.

### Installation of Optional Blower:

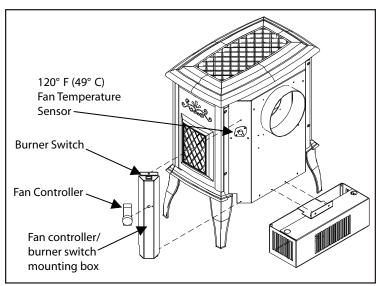


Figure 55: Optional Fan Kit Installation.

Remove the pre-assembled blower from the packaging. Inspect the blower for damage. If damage is noticed call your dealer, distributor or courier company and have components replaced.

Place the fan assembly behind the unit and secure with the two screws provided (as shown in Figure 55).

Remove the fan controller, mounting box and install fan controller. Neatly dress the wires from the fan assembly to the fan controller.

Install the fan temperature sensor with the two (2) screws provided.

Plug the fan assembly into the wall outlet and turn the unit on to ensure fan operation.

# TROUBLE SHOOTING

Problem	Possible Cause Solution		
The main burner does not	The gas valve may not be on.	• Check that the gas control knob is in the "ON" positio	
ignite when called for.	Thermostat is not calling for heat.	Adjust the thermostat several degrees above ambient temperature.	
	Problem with gas valve.	<ul> <li>Use a DC voltmeter to measure the voltage across the TPTH and TP terminals. Main operator voltage: Open circuit ≥ 325mV Closed circuit ≥ 100mV</li> <li>If voltage is not present, check the control circuit for proper operation.</li> <li>If proper control system voltage is present, replace the gas control.</li> </ul>	
Spark will not light the pilot after repeatedly pressing the spark ignitor.	Defective piezo ignitor.	<ul> <li>Check connections to ignitor.</li> <li>If ignitor connections are good but no spark, replace ignitor.</li> </ul>	
	Broken spark electrode.	Check for broken ceramic insulation, replace electrode if broken.	
	Misaligned spark electrode.	If spark is not arcing from electrode to pilot, loosen the screws on the pilot base adjust and tighten.	
Pilot will not remain lit.	Problem with thermocouple circuit.	<ul> <li>Check for proper connection of the thermocouple to the rear of the valve. If loose, fully tighten.</li> <li>Check pilot for full flame impingement around thermocouple. If flame is too small, check gas pressure, adjust pilot rate screw, check pilot head for damage.</li> <li>Check thermocouple voltage at valve. It must be greater than 5 mV. If low, replace thermocouple.</li> </ul>	
	Air in gas line (pilot dies while knob is depressed).	Bleed line.     Check gas line pressure.     Contact dealer.	
Burners will not remain lit.	Problem with thermopile circuit.	<ul> <li>Check gas line pressure .</li> <li>Check for flame impingement on thermopile. If low, see "Pilot will not remain lit".</li> <li>Check thermopile for minimum of 300 mV when burner is switched on.</li> <li>Check wiring to thermostat for breaks.</li> </ul>	
Flame lifting	Leak in vent pipe	Check for leaks in vent connections.	
	Improper vent configuration	Check vent configuration with manual.	
	Terminal may be recirculating flue gases	<ul> <li>Check to see if terminal is on correctly.</li> <li>May need to install high wind termination cap.</li> <li>Contact dealer.</li> </ul>	
Glass fogs up	Normal Condition: after the appliance warms up the glass will clear.  **Due to additives in gas, glass may get hazy during operation** Clean as needed.		
Blue Flames	Normal during start up: flames will yellow as the fireplace heats up.		
Flames are burning "dirty" or sooting	Flame impingement	<ul> <li>Check log positioning.</li> <li>Increase primary air by opening the venturi shutter and/ or by opening the vent restrictor.</li> <li>See also "Burners will not remain lit."</li> </ul>	
Remote control doesn't work	Problem with the remote	One or more of the batteries are dead. See remote control instructions.	
	Problem with fireplace	<ul> <li>The on/off switch is turned to OFF.</li> <li>The gas control valve is turned to PILOT or OFF.</li> <li>The pilot has gone out.</li> </ul>	

# PARTS LIST

Reference Number	Description	Part Number
1	120°F (49°C) Ceramic Fan Temperature Sensor	EC-001
2	S.I.T. Nova Valve Convertible	50-1421
3	Thermocouple	EC-009
	Spark Electrode with Ignitor Cable	EC-011
3	Thermopile	EC-012
3	Pilot Orifice NG Threaded	EC-019
3	Pilot Orifice LP Threaded	EC-020
3	Pilot Gasket	EC-021
	SS Flex Connector 3/8" Elbow 18" long	EC-024
4	FPI Burner Switch	EC-026
5	FS Fan Controller Knob	EC-040
	Domestic Power Cord - 115V	EC-042
	Heyco Strain Relief	EC-044
	Window Channel Tape	EC-058
6	Simpson Dura Vent GS Adaptor	EC-060
5	Fan Controller With Knob - 115V	EF-045
7	Fan Kit	30-056
	Screen	30-057
8	Relief Door Gasket	50-019
9	Door - Painted	50-020
10	Burner Complete	50-021
	Log Set With Embers	50-022
	Lighting Instructions (French)	50-023
	Lighting Instructions (English)	50-024
	Owner's Manual	50-029
	1" Door Knob (Silver)	50-030
	Valve Cover	50-089
	Electronic Ignition Module Switch	50-329
11	Blank Orifice #73	50-343
12	Pressure Relief Door with Gasket & Brackets	50-367
13	Inner door handles (set of 2)	50-457
	Embers	50-491
14	Dual Convection Blower (no mount) - 115V	50-512
	Burner Switch Wiring Harness	50-560
	Fan Kit Wiring Harness	50-561

# PARTS LIST

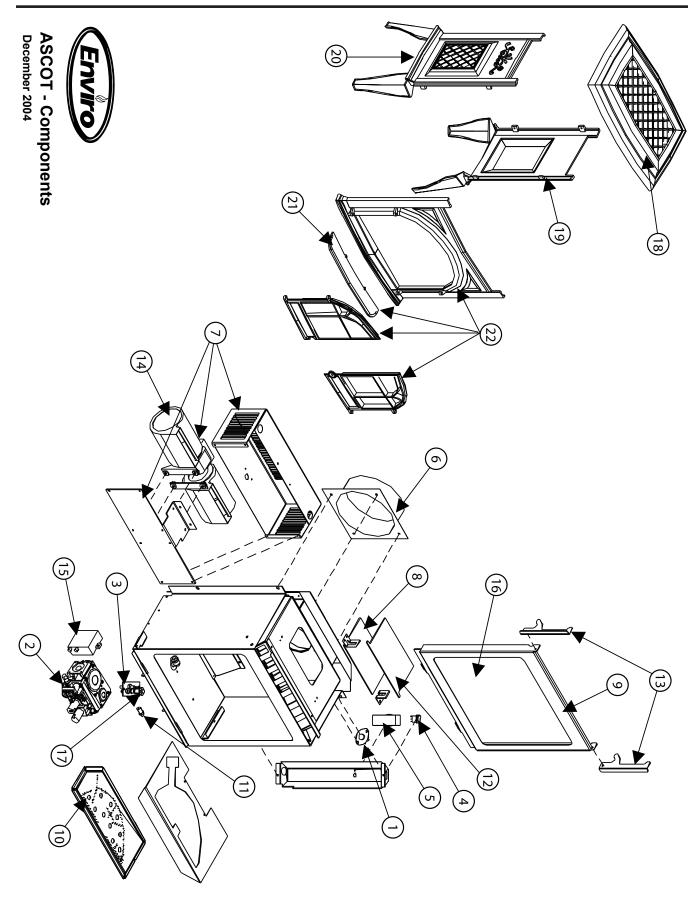
Reference Number	Description	Part Number
15	Electronic Ignition Module	50-589
	Dual Bulb Door Gasket (10 ft)	50-634
16	Glass with Gasket	50-715
	Hinge pin - silver	50-750
	Drafthood Adaptor (Complete)	50-841
	Drafthood Adaptor Spill Switch Assembly (with Wiring Harness)	50-885
	Drafthood Adaptor Decorative Brass Ring	50-894
17	Three Flame Pilot Hood	50-925
	Convertion Kit from LG to NG Convertible	50-1442
	Convertion Kit from NG to LG Convertible	50-1443
	S.I.T. Valve Conversion Screw With O-Ring	50-1450
	S.I.T. Valve Conversion Screw Cap	50-1451
	Cast Description	
18	Top - Painted Black	50-031
18	Top - Antique White	50-032
18	Top - Diamond Black	50-033
18	Top - Inferno Red	50-034
18	Top - Pearl Grey	50-035
18	Top - Wedgewood Blue	50-036
18	Top - Westport Green	50-037
18	Top - Antique Chestnut	50-855
19	Side panel (right) - Painted Black	50-052
19	Side panel (right) - Antique White	50-053
19	Side panel (right) - Diamond Black	50-054
19	Side panel (right) - Inferno Red	50-055
19	Side panel (right) - Pearl Grey	50-056
19	Side panel (right) - Wedgewood Blue	50-057
19	Side panel (right) - Westport Green	50-058
19	Side panel (right) - Antique Chestnut	50-856
20	Side panel (left) - Painted Black	50-059
20	Side panel (left)- Antique White	50-060
20	Side panel (left)- Diamond Black	50-061
20	Side panel (left)- Inferno Red	50-062
20	Side panel (left)- Pearl Grey	50-063

# PARTS LIST

Reference Number	Cast Description	Part Number
20	Side panel (left)- Wedgewood Blue	50-064
20	Side panel (left)- Westport Green	50-065
20	Side panel (left) - Antique Chestnut	50-857
21	Cast ash shelf - Painted Black	50-066
21	Cast ash shelf - Antique White	50-067
21	Cast ash shelf - Diamond Black	50-068
21	Cast ash shelf - Inferno Red	50-069
21	Cast ash shelf - Pearl Grey	50-070
21	Cast ash shelf - Wedgewood Blue	50-071
21	Cast ash shelf - Westport Green	50-072
21	Cast ash shelf - Antique Chestnut	50-858
22	Front complete (with doors & ash shelf) - Painted Black	50-073
22	Front complete (with doors & ash shelf) - Antique White	50-074
22	Front complete (with doors & ash shelf) - Diamond Black	50-075
22	Front complete (with doors & ash shelf) - Inferno Red	50-076
22	Front complete (with doors & ash shelf) - Pearl Grey	50-077
22	Front complete (with doors & ash shelf) - Wedgewood Blue	50-078
22	Front complete (with doors & ash shelf) - Westport Green	50-079
22	Front complete (with doors & ash shelf) - Antique Chestnut	50-859
	Complete cast body - Painted Black	50-569
	Complete cast body - Antique White	50-570
	Complete cast body - Diamond Black	50-571
	Complete cast body - Inferno Red	50-572
	Complete cast body - Pearl Grey	50-573
	Complete cast body Wedgewood Blue	50-574
	Complete cast body - Westport Green	50-575
	Complete cast body - Antique Chestnut	50-860

When using Forrest Paint for venting pipe use the following colour codes for the corresponding cast colour:

Antique White	64EN7795
Diamond Black	64E200
Inferno Red	64DN8880
Pearl Grey	64EN7488
Wedgewood Blue	64EN6701
Westport Green	64EN6943
Antique Chestnut	64E816



### WARRANTY

Sherwood Industries Ltd. offers a Limited Lifetime Warranty on this gas product. This limited lifetime warranty covers the appliance for a period of seven years from the date of installation. This warranty applies only to the original owner in the original location

Covered under the lifetime warranty are, Surround Panels and Chassis and Heat Exchanger. These steel components are covered against manufacturer's defects for 7 years and labor for the first year. (A) The following exclusions apply: over-firing due to incorrect setup or tampering, damage caused by incorrect installation, usage or abuse. The unit must be properly installed by a qualified technician or installer, and must meet all local and national gas and building code requirements.

We also cover against manufacture defects under our Limited Lifetime warranty. The following components; Gold Plating, Log Set, Burners and Glass (A) The following exclusions apply:

<u>Porcelain finishes</u>- Damage caused by chipping, scratching, marring, chemicals, fingerprints, abrasive cleaners or discoloration with age.

Glass- use of harsh or abrasive cleaners, striking the glass or surface contaminates.

Log set- Damage caused by incorrect handling or misuse.

Burners- damage caused by improper or continuous operation under incorrect conditions.

Sherwood Industries Ltd. offers a 2-year warranty on all the Electrical Components and Gas Components against manufacturing defects. Paint is covered against flaking. This offer includes parts and labor for 1 year and for parts only thereafter.

Your dealer shall make all claims under this warranty in writing.

# WHEN FILING A WARRANTY CLAIM PLEASE COMPLETE THE FOLLOWING INFORMATION ON AN OFFICIAL WARRANTY CLAIM FORM:

### TO THE DEALER

Name, address and telephone number of purchaser and date of purchase.

Date of installation. Name of installer and dealer. Serial number of the appliance. Nature of complaint, defects or malfunction, description and part # of any parts replaced.

### TO THE DISTRIBUTOR

Sign and verify that work and information are correct.

This warranty covers defects in materials and workmanship only if the product has been installed according to the manual's instructions. If the product is damaged or broken as a result of misuse or mishandling the warranty does not apply. The warranty does not cover removal and re-installation costs.

Sherwood Industries Ltd. reserves the right to repair or to replace the defective product. The shipping costs are to be paid by the consumer. All warranties by the manufacture are set forth herein and no claim shall be made against the manufacturer on any oral warranty or representation.

Sherwood Industries Ltd. and its employees or representatives will not assume any damages, either directly or indirectly caused by improper usage, operation, installation, servicing or maintenance of this appliance.

Sherwood Industries Ltd. reserves the right to make changes without notice. Please complete and mail the warranty registration card and have the installer fill in the installation data sheet in the back of the manual for warranty and future reference.

# INSTALLATION DATA SHEET

The following information must be recorded by the installer for warranty purposes and future reference.

NAME OF OWNER:	NAME OF DEALER:
ADDRESS:	ADDRESS:
DUONE	PUONE
PHONE:	PHONE:
MODEL:	NAME OF INSTALLER:
SERIAL NUMBER:	
DATE OF PURCHASE: (dd/mm/yyyy)	
DATE OF INSTALLATION:(dd/mm/yyyy)	ADDRESS:
☐ NATURAL GAS (NAT) ☐ PROPANE(LPG)	
INLET GAS PRESSURE:in wc	
MAIN BURNER ORIFICE:# DMS	PHONE:
PILOT ORIFICE #ORin diam.	
INSTALLER'S SIGNATURE:	

MANUFACTURED BY:
SHERWOOD INDUSTRIES LTD.
6782 OLDFIELD RD. SAANICHTON, BC, CANADA V8M 2A3
www.envirofire.biz
April 3, 2006
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